5 H.—34.

A Radio Research Committee, representative of the National Broadcasting Service, the Defence services, the Post and Telegraph Department, and the Department of Scientific and Industrial Research, was set up during the year to direct and co-ordinate radio research in New Zealand and to facilitate co-operation with the Australian Radio Research Board and the British Broadcasting Corporation in the investigation of problems of common interest. The Committee has completed a survey of the measurements of radio signals from the main broadcasting-stations, and the results are in many ways remarkable and of great value in the problems of coverage.

An event of outstanding importance, and one which may be expected to have far-reaching consequences, was the visit to New Zealand of Dr. John Hammond, F.R.S., of the Animal Nutrition Research Institute, Cambridge. On the recommendation of the Council of Scientific and Industrial Research, the Government invited Dr. Hammond to New Zealand to report on the organization of animal research, particularly in relation to problems of nutrition and production. Following an extensive tour of the Dominion, in the course of which he obtained first-hand knowledge of the animal industry and its attendant problems, Dr. Hammond prepared a comprehensive report on the problems of animal research in New Zealand as he saw them and the type of organization which he considered would most effectively deal with them. This report will form a valuable basis of discussion between the State Departments concerned and representatives of the producers with a view to recommending a course of action to the Government.

The Department was fortunate to obtain the services of Dr. J. H. Kolb, Professor of Rural Sociology in the University of Wisconsin, U.S.A., in an advisory capacity, to assist the Social Science Research Bureau. Dr. Kolb, whose visit was made possible by the Carnegie Corporation, has given most valuable inspiration and direction not only to the work of the Social Science Research Bureau, particularly the rural standard-of-living survey, but also to other activities of the Department touching directly upon social problems—e.g., the land-utilization survey of Hawke's Bay.

The work of the Plant Research Bureau has been further consolidated, and is now a major branch of the Department's activities. Suitable accommodation for the various Divisions has been provided, and the Bureau is now much better equipped to cope with the wide range of problems presented to it. The season was a particularly difficult one as regards plant and insect pests of all kinds, and several new imported plant diseases were definitely identified. The importation of plant diseases and insect pests has become a serious problem, and, in co-operation with the Department of Agriculture, steps are being taken to secure more effective quarantine of imported plant material by making fuller use of the special facilities available in the Plant Diseases Division.

A very successful Meteorological Conference, representative of the various countries vitally concerned in the development of meteorological services for aviation in the south-west Pacific, was held during the year at Wellington.

During the year a Medical Research Council was set up under the Department of Health, the Department of Scientific and Industrial Research being represented by the Secretary in order to secure the necessary liaison with the research activities of the latter Department.

The results of the experimental work in geophysical survey carried out during the past few years have been collected in the form of a bulletin, which gives a valuable indication of the application of methods in New Zealand. This is now in the final stages of printing.

The coal-survey investigations have indicated that it will probably be desirable to conserve certain special coals for use in the iron and steel industry rather than use them for purposes for which other coals are equally suitable.

The accommodation in Head Office and Wellington branches of the Department is severely taxed, and there are, in addition, the disadvantages consequent upon the present decentralization. A start has been made, however, with plans for new buildings which will provide the much-needed space and centralization.

The Head Office staff was augmented during the year by the appointment of Mr. M. McG. Cooper to replace Mr. W. M. Hamilton, who was appointed as Assistant Scientific Liaison Officer in London, and the attachment of Mr. L. W. Tiller on his return from England to Head Office staff in the capacity of Fruit Research Officer.

Appointments to the research organizations of the Department during the year included the following: Mr. J. M. Allan, Tobacco Research Officer; Dr. T. R. Vernon, Mycologist, Dairy Research Institute; Dr. S. Townend, Textile Research Officer, Wool Manufacturers' Research Association; and Dr. H. Finlay, Micropalæontologist, Geological Survey Branch.

The staff of the Department have loyally and efficiently carried out the programme of work for the year, and their co-operation is gratefully acknowledged.

DOMINION LABORATORY.

The Dominion Laboratory and its branches examined during the year the large total of 15,452 samples for Government Departments and in connection with various industrial research investigations, an increase of 3,320 over last year's total. A full report of the work done will be issued separately.

During the year the school milk scheme was introduced, and a considerable number of samples of the milk supplied to schools were examined for purity and effective pasteurization.

The special laboratory for the physical and chemical examination of coal samples taken in connection with the survey of the coal resources of the Dominion is now in effective operation in collaboration with the geologists in the field. A geological report on the Blackburn area was published in last year's annual report, and work is at present centred mainly in the Greymouth and Westport areas.